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12-14 June 2007, at US Naval Academy, Annapolis, MD

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Warrior Analysts: Best Practices for Developing Lessons Learned

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MORS WORKSHOP "Warrior Analysts: How Can We Be Better Combat Multipliers?" 29 January- 1 February 2007

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Problem Statement

Generate recommendations to improve processes for:

- (1) identifying lessons learned
- (2) integrating lessons learned into tactics, techniques, procedures and doctrine governing military operations
- (3) how lessons learned are communicated and disseminated.



Focus Areas

- Data collection
 - institutional level
 - real-time, current operations
- Transforming data into usable information
- Disseminating and assessing lessons learned incorporating LLs into tactics, techniques, and procedures (TTPs)
- Communicating lessons learned to commanders and decision makers



Analytical Approach

- Benchmark where we are today (background presentations):
 - CALL
 - MNF-I ORSA
 - RAF Defence Science & Technology Laboratory
 - USAF A/A9L, PACOM AC
- Lessons Learned (LL) Process Analysis:
 - Defining localized LL Process for the Warrior Analyst
 - LL Process Decomposition:
 - Identify policies, processes, and procedures
 - Examine lessons learned drivers present in ongoing operations
 - LL Functional Flow
 - Identify how information, lessons learned, and feedback flow through a lessons learned system



Lessons Learned Process Analysis

LL Process Decomposition Organizational (Hierarchy)
Decomposition

Functional Hierarchy

Functional (Process)
Flow

Identify organizations and individuals who are responsible for enabling the lessons learned system

Identify policies, processes, procedures required for lessons learned system

Identify how information, lessons learned, and feedback flow through the lessons learned system



Affinity Diagramming

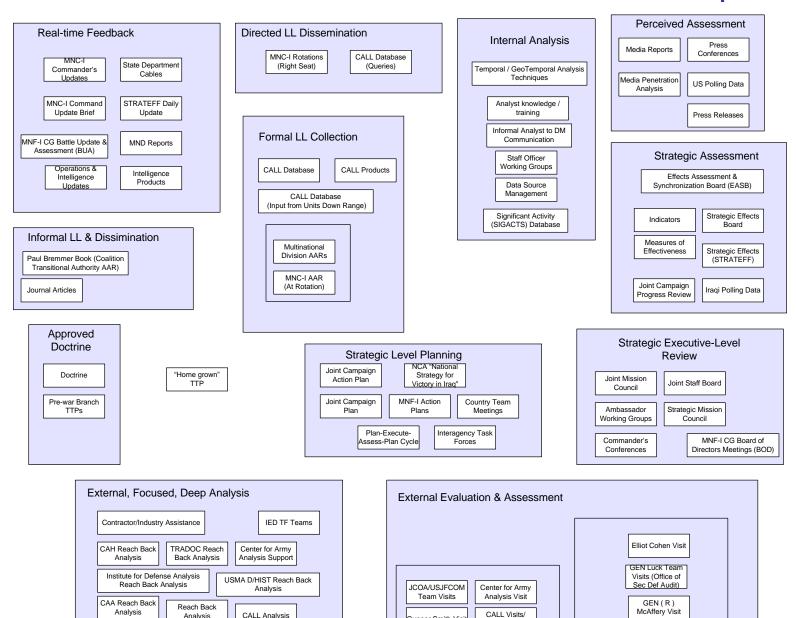
An **Affinity Diagram** is a tool that gathers large amounts of language data (ideas, opinions, issues) and organizes them into **groupings based on their natural relationships.**

Affinity process is often used to group ideas generated by brainstorming.

Method:

- 1. State the issue to be examined in broad terms, such as an open ended question or statement.
- 2. Generate and record ideas. Collect them on a 2D space, in no particular order, and where everyone can see them.
- 3. Arrange the ideas in related or <u>similar-sounding</u> groupings follow intuition and avoid urge to quickly fit into currently existing groups.
- 4. Choose a word or phrase that captures the intent of each group and label the group with a category name or title.

What are the issues and drivers for lessons learned in Iraq?



Gunner Smith Visit

Teams

State Dept HQ Visits

CALL Analysis

Analysis



Analysis Process Enabled through the use of GroupSystems

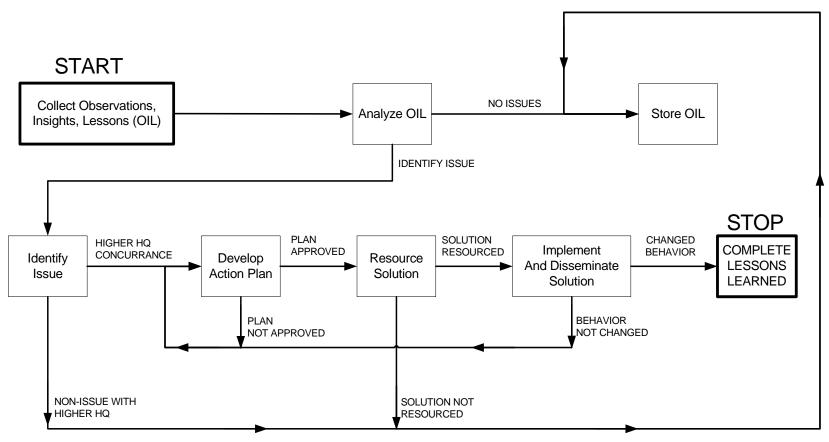
- Generated 180 observations on lessons learned process and procedures
- Observation Groupings:
 - initially generated 12 categories
 - reduced to 6 categories and 29 sub-categories
- Benefits of using GroupSystems:
 - involved the entire group
 - anonymous inputs by working group members
 - rapid filtering and synthesis of observations
 - -rapid generation of ideas and observations

Bottom Line: the GroupSystems technology short-circuited unproductive group dynamics and supported real-time analytical collaboration.



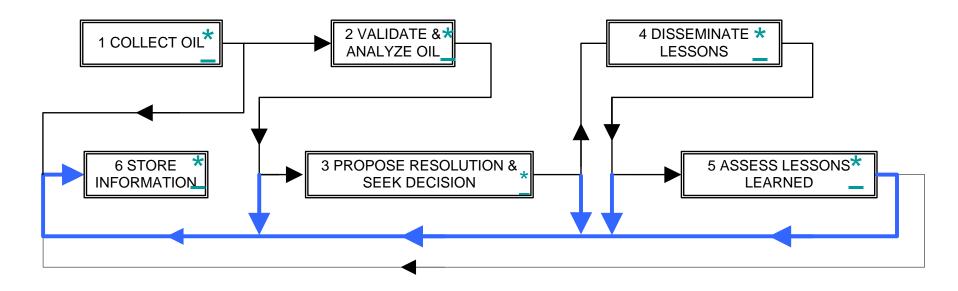
Lessons Learned Functional (Process) Flow Diagram

United States Army Deliberate Lessons Learned Process (Army Regulation 11-33, Fig 4.1)



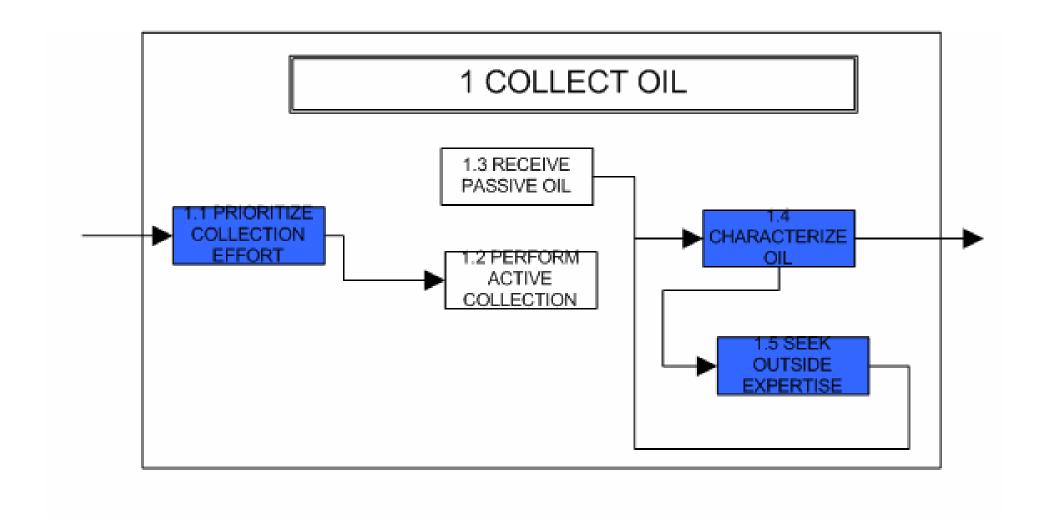


WG4 RECOMMENDATION: PROPOSED LESSONS LEARNED PROCESS FOR THE WARRIOR ANALYST



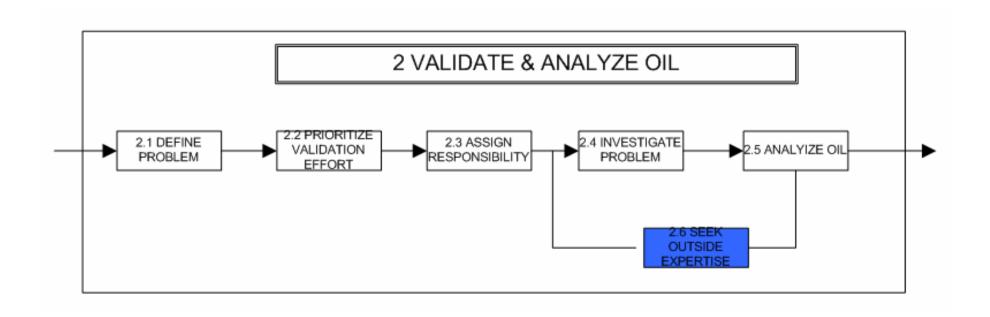








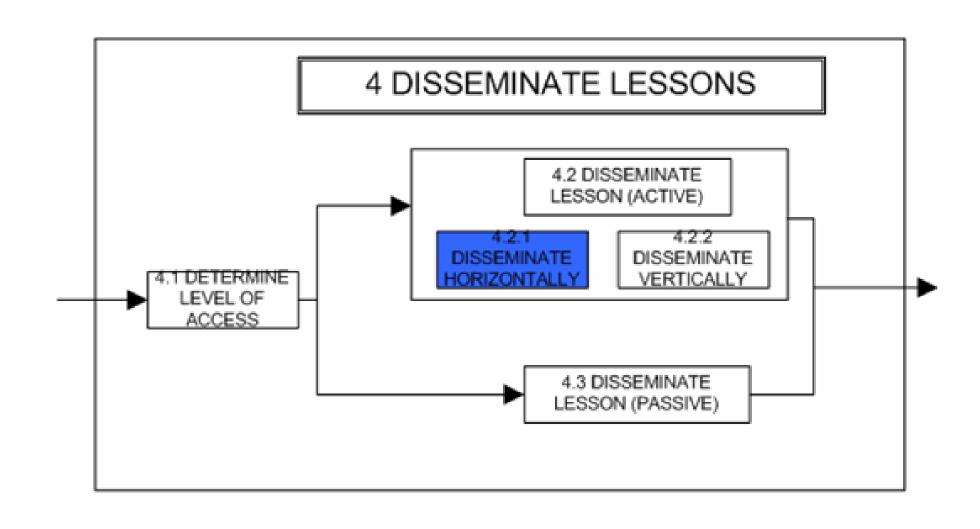






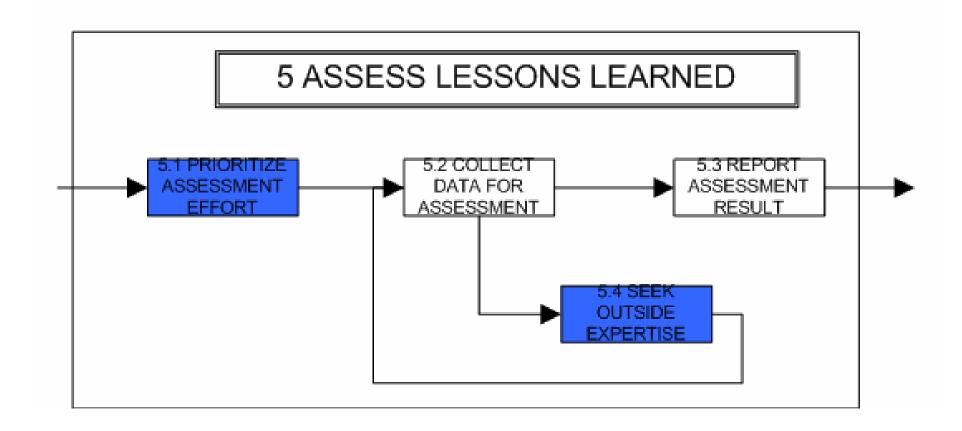
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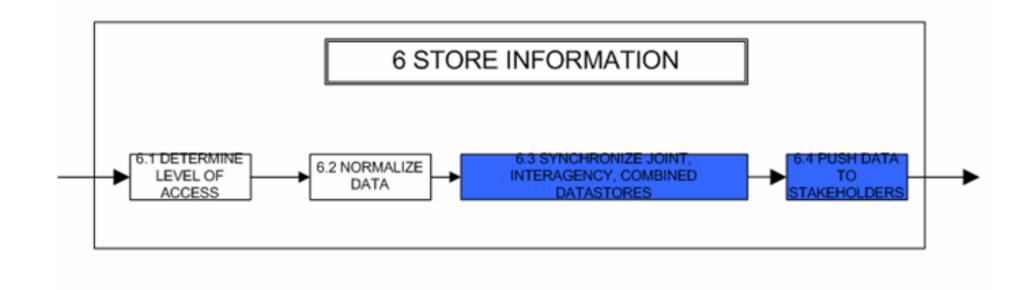
















Insights

- Current Culture does not lend itself to sharing faults, which is a hindrance to the Lessons Learned process.
- Some lessons are given a higher classification than is necessary, hindering dissemination of Lessons Learned.
- Historians are under-used in the Lessons Learned process.



Summary of Findings

- Duplication exists in the efforts by Lessons Learned, Historians and OAs. Opportunities exist for synergy and efficiencies in a combined effort.
- Dissemination of Lessons Learned is not always timely and effective.
- Limited opportunities exist to exchange Lessons
 Learned process ideas among services, agencies, and
 Allies.
- There is no mechanism to exchange Lessons Learned between services, agencies, and Allies.
- There is a need for OA and Lessons Learned at lower command levels (Brigade and Air Wing).



Finding: Redundant Efforts

Duplication exists in the efforts of Lessons Learned Personnel, Historians and Warrior Analysts. Opportunities exist for synergy and efficiencies in a combined effort.

Recommendation:

Coordinate the efforts of Lessons Learned Personnel, Historians, and Warrior Analysts to improve the lessons learned process.



Finding: Ineffective Dissemination

Dissemination of Lessons Learned is not always timely and effective.

Recommendation:

Look at Aviation Safety and other successful dissemination models with a view of adopting procedures.



Finding: LL Process Development

Limited opportunities exist to exchange ideas on the Lessons Learned process among services, agencies, and Allies.

Recommendation:

Advance Lessons Learned cooperation among services, agencies, and Allies:

- Hold regular conferences, workshops
- Develop Joint Lessons Learned repository/search tool by JCS



Finding: LL Dissemination

There is no mechanism to exchange Lessons Learned among services, agencies, and Allies.

Recommendation:

The Joint Staff develop a Lessons Learned portal/repository/search tool to include US Government Agencies and Allies, where possible.



Finding: LL Organization

There is a need for Warrior Analysts and Lessons Learned Personnel at lower command levels (Brigade and Air Wing).

Recommendation:

Add Warrior Analysts and Lessons Learned personnel to Brigade and Air Wing staffs.

At all echelons below Brigade/Wing, assign lessons learned requirements as an additional duty with direct access to the Commander.



Questions?



Insights

Combine Analysis and Lessons Learned Efforts

Dissemination of Lessons Learned is Broken

- Primarily a passive, voluntary system
- New Army effort uses 150 nodes
- Little to no assessment of lesson efficacy

Need write once, read everywhere data repositories that span joint, combined, interagency spectrum

Security Classification must be pragmatic



Recommendations

Examine how Safety/Aviation communities disseminate "lessons":

- Can't wait for institutionalized changes
- Formalized, directed "flash traffic" in the interim

Organize Recurring Lessons Learned Conference/Society

Merge Operational Analysis (OA) and Lessons Learned (LL) efforts:

- Add OA/LL positions to BCT, SQD levels
- Resource OA positions at existing levels to handle LL efforts

Create a Joint, Combined, Interagency LL Intelligent Search Tool:

- Employ OLAP middleware solution, not another datastore

Employ cutting-edge IT solutions from industry:

- Intelligent, content aware applications that push individualized LL
- Search engines are not enough